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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LEE, LAURA MICHELLE	
ART UNIT	PAPER NUMBER
3724	

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08/05/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/709,344	REINBOLD ET AL.	
	Examiner	Art Unit	
	LAURA M. LEE	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/23/2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4-12,15 and 16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4-12, 15-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed on 4/23/2009, in which claims 4-12, 15-16 are pending, and claim 16 is new.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 4-12 and 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (U.S. Publication 2002/0069937). In regards to claims 15, 16 Murray discloses a method for sawing pieces of wood in a sawing station (Figure 1), the method comprising the steps of: a. measuring the pieces of wood in a measuring station (paragraph [0038], lines 7-10);

b. sequentially and continuously (continuous feed, paragraph [0041]) transporting at a variable feeding velocity (variable speed conveyor; paragraph [0038]) on a transport device (infeed conveyor, 14 or alternatively conveyors 54/62) the pieces of wood (12) from the measuring station to a sawing station (saw, 26) and scanning (photocell 28) a position of each of the pieces of wood during transport on the transport device from the measuring station to the sawing station and sending input signals of the scanned position to a control unit (paragraph [0037);

c. cutting the pieces of wood (12) in the sawing station (26) in a transverse direction (see Figure 1) that is transverse to a transport direction of the pieces of wood in the sawing station while the pieces of wood are stopped briefly (paragraph [0038], last nine lines) to allow cutting in the transverse direction into at least two sections based upon measured results taken in the step a) (paragraph [0038], lines 7-10, and lines 63-end of paragraph) and monitoring a saw position (via log diameter information; see paragraphs [0039 and 0040], especially lines 14-24 of paragraph 0039) of a saw in the sawing station and sending input signals of the saw position to the control unit;

d) recalculating and variably adjusting (variable feed conveyor), based upon the input signals of step b) and step c), the feeding velocity of the pieces of wood during transport according to step b) such that sequentially transported pieces of wood have minimal spacing relative to one another (i.e. increased throughput; paragraph [0039]) and a second piece of wood that trails a first piece of wood being cut in the sawing station is already transported into the sawing station (for example is already on conveyor 14 and/or 62) while the first piece of wood is still being cut.

The sawing station is considered as shown in Figure 1, after the defined measuring/ scanning station, which paragraph [0038] disclosed occurs prior to the logs arrival on conveyor 14.

Murray discloses that the conveyor, 14, is a variable speed conveyor, that continues to feed during the intervals when rolls 18, 19, 20, and 21 are stopped to buck the log. Alternatively, Murray discloses that that the infeed conveyor can be co-ordinated with the feed rolls 18, 19, 20, and 21 to stop and go in conjunction with them,

and still obtain benefits in increased throughput, as the outfeed will continue to operate while the log is bucked. Therefore, Murray discloses that although the conveyor is normally run as a variably speed conveyor; it can also be coordinated to stop and go with the feed rolls that are processing the previously fed log. Murray discloses that the conveyor is normally run at a variable speed, which could mean one of two things; that the conveyor can be changed to process the logs at various discrete speeds, or secondly that during a single run it is apparent that the speed of the conveyor is capable of being continuous changed. It is apparent from the totality of the disclosure that it is the second interpretation that the Murray intended. However, to the extent that it can be argued that variable speed conveyor implied discrete speeds, as there are a finite number of identified, predictable interpretations, it would have been obvious to one having ordinary skill in the art at the time of the invention to have presumed that the variable speed conveyor implied a continuously changing speed. Although, Murray does not go one step further and positively state that the variations in speed of the variable speed conveyor are also linked to the movement of the feed rolls and thus the processing the previously fed log, it is apparent from the disclosure, that that must be the case, in order that the logs are not processed so fast that they contact each other during transport, especially as increased throughput is the desired effect. It would have been obvious that the variations in speed of the conveyor were imparted by the processing and transport of the prior logs, as that is the only variable that would affect the speed of the following log, especially as Murray in the next statement discloses that the conveyor can also run discretely stop and go with the feed rolls. Therefore, even

though the variable feed conveyor of Murray does not specifically disclose that the variable feed of the conveyor is directly linked to the processing of the previous log, it would be obvious to coordinate the movement of the logs such that the through-put (paragraph [0039]) is maximized as desired by the applicant and also the logs are safely transported such that they do not run into each other.

In regards to claim 4, the modified device of Murray discloses wherein the feeding velocity of the second piece of wood is continuously recalculated (based upon the speed of the feed rolls, 18,19, 20 and 21).

In regards to claim 5, the modified device of Murray discloses wherein the step of scanning (monitoring by photocell 28) in step b is done continuously and wherein the control unit recalculates the feeding velocity (stop and go) based upon the continuously scanned pieces of wood.

In regards to claim 6, the modified device of Murray discloses wherein a feeding velocity of the second piece of wood is controlled so as to minimize a distance between the first and second pieces of wood (i.e. variable feed conveyor; paragraph [0038] and see paragraph [0041]).

In regards to claim 7, the modified device of Murray discloses wherein in step a)a length of the pieces of wood is measured (i.e. a length of the defect; paragraph 003).

In regards to claim 8, the modified device of Murray discloses wherein in step a) defects of the pieces of wood is measured (paragraph [0003]).

In regards to claim 9, the modified device of Murray discloses the step of saving the measured results (see paragraph [0037]).

In regards to claim 10, the modified device of Murray discloses wherein in the measured results are used for recalculating and variable adjusting the feeding velocity according to step d (paragraphs [0038-0041).

In regards to claim 11, the modified device of Murray discloses wherein in step b) the pieces of wood are supplied without interruption to the sawing station (along infeed conveyor , 14).

In regards to claim 12, the modified device of Murray discloses the step of decoupling a drive for transporting the pieces of wood to the sawing station from a drive of the sawing station (as the log is transferred from the conveyor 14 to the hour glass roll 16).

Response to Arguments

4. Applicant's arguments filed 4/23/2009 have been fully considered but they are not persuasive. Applicant's specification details (see paragraph [0013]) that "Advantageously, the drive for transporting the trailing pieces of wood is decoupled from the drive for the pieces of wood in the sawing station. In this way, the transport of the pieces of wood within the sawing station cab be carried out by a stop and go method while the supply of pieces of wood to the sawing station is continuous and optionally, can be carried out at a variable velocity." Murray discloses (see paragraph [0004]) that "The present inventor, as disclosed in his U.S. Patent No. 5,680,802 issued on Oct. 28,1997, provided a log backsawing system in which the speed of the infeed or outfeed conveyors can be operated independently of the progress of the log at the sawing

station to improve the throughput speed. " This acknowledgment by Murray that the conveyors are operated independently, conveys that the conveyors are decoupled from the operation of the sawing station. Murray also discloses that (see paragraph [0038]) "The tilted infeed and outfeed conveyors 14 and 24 while may be belt of chains, which can be run at a fixed constant speed, although a variable speed is normally used with this system." In paragraph [0041] Murray discloses "Since the infeed and outfeed conveyors continue to feed during the intervals when rolls 18, 19, 20 and 21 are stopped to buck the log, gaps between the logs are reduced and the throughput is increased. " Obviously, if the conveyors are no longer necessarily tied into the stop and go of the sawing operation, because they are independently operated, there would be some controlling means to runs the workpieces smoothly while still maximizing the through put of the workpiece processing or the movement of the workpieces would be left to chance. Applicant has not distinguished the structure of this movement over this inherent obviousness.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/
Examiner, Art Unit 3724
08/03/2009
/Boyer D. Ashley/
Supervisory Patent Examiner, Art Unit 3724